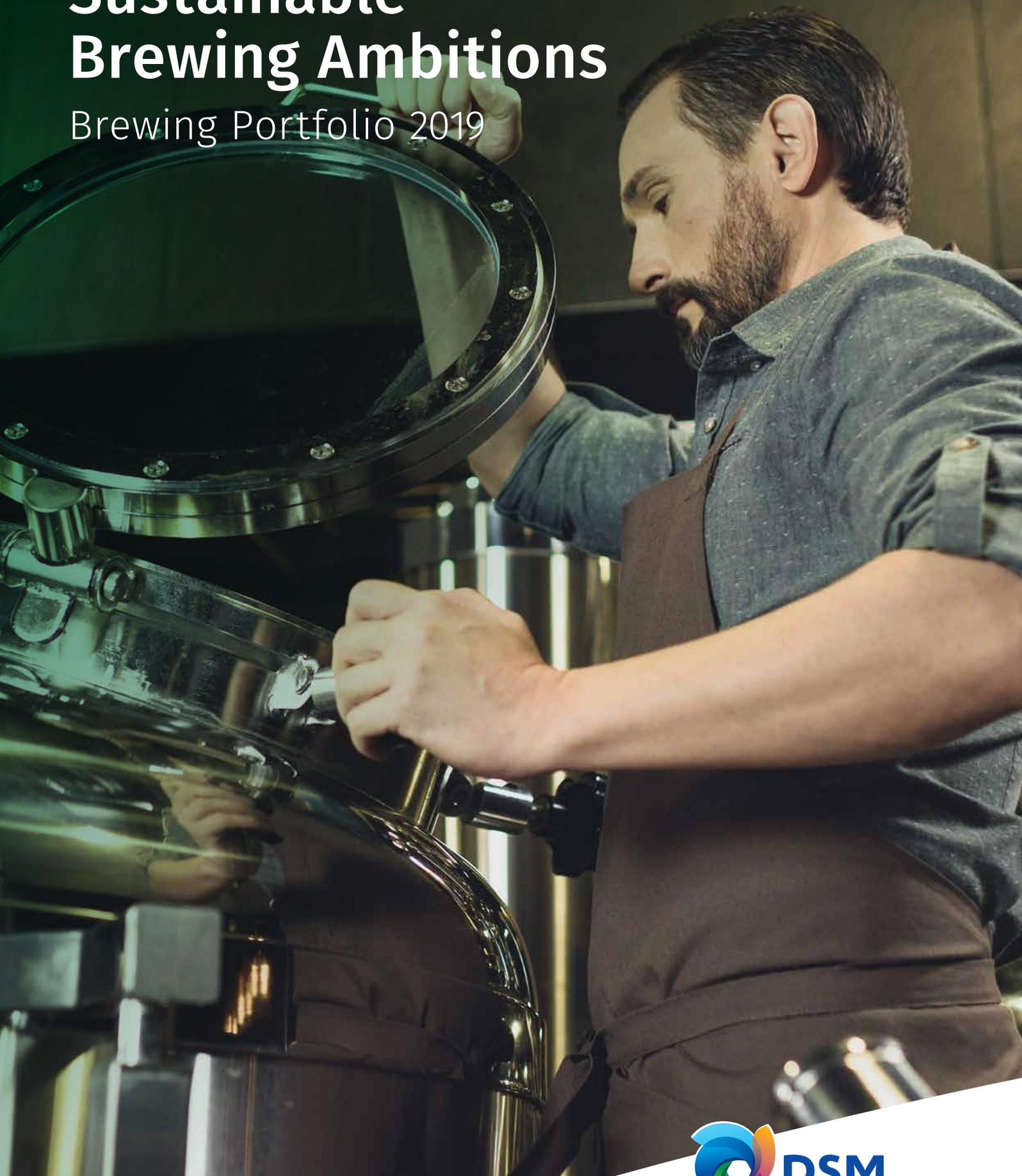


Enzymes for Sustainable Brewing Ambitions

Brewing Portfolio 2019



Brewing Product List

Brewers Clarex® - Natural beer stabilization		
Brand name	Product description	Benefits
Brewers Clarex®	Liquid fungal proline-specific endo-protease	Brewers Clarex is the only enzymatic technology that can prevent chill haze, enabling cost-effective beer stabilization that helps to gain capacity through shorter conditioning at higher temperatures. No extra CAPEX needed to stabilize your (craft) beer and increase shelf life. No interference with foam quality and taste. Enzymatically degrades gluten, and is thus the only way to produce a gluten-free beer from (barley) malt.

Chill haze prevention		
Brand name	Product description	Benefits
Collupulin® L	Liquid vegetal protease (papain)	Prevents chill haze by degradation of proteins in the beer.
Collupulin® MG	Micro-granulate vegetal protease (papain)	Prevents chill haze by degradation of proteins in the beer.

Brewing enzymes for mashing		
Brand name	Product description	Benefits
Brewers Compass™	An optimized liquid enzyme blend of fungal and bacterial amylases, proteases and beta-glucanases.	Brewers Compass complements the enzymes present in barley (mainly β -amylase and exo-peptidase) and provides all other enzymes required for effective barley brewing in one single liquid product – making the process faster and simpler than ever before. It ensures low wort viscosity and high filterability. It also prevents the formation of haze in beer, which can occur due to the incomplete degradation of haze forming polysaccharides in the brewhouse. Brewers Compass can also be useful when other adjuncts are used, and the enzyme activity of the used malt is not sufficient
MATS L Classic	Liquid bacterial thermostable α -amylase	Ensures effective starch liquefaction when using adjuncts with a high gelatinization temperature, such as corn, maize, rice, sorghum and cassava and contributes to improved extract yield.
Amigase® Mega L	Liquid amyloglucosidase	Releases glucose and accelerates fermentation and reduces fermentation time. Enables production of high attenuated beers, and 'light' (low carb) beers.
Mycolase™	Liquid fungal α -amylase	Accelerates fermentation and reduces fermentation time. Useful to ensure desired maltose content in the wort.
BREWERS PROTEASE® DS (Maxazyme NNP DS, Maxipro NPU)	Liquid bacterial neutral protease (concentrated)	Improves fermentability by increasing free amino nitrogen (FAN) in wort, increases yield.

Brewing enzymes for filtration		
Brand name	Product description	Benefits
Filtrase® NL	Liquid fungal thermostable β -glucanases and xylanases	Improves the mash and beer filtration also suitable for use with high mashing and sparging temperatures and ensures liberation of the starch for optimal brewhouse yield and performance.
Filtrase® NL Fast	Liquid fungal thermostable β -glucanases and thermostable xylanases	Improves the mash and beer filtration also suitable for use with high mashing and sparging temperatures and ensures liberation of the starch for optimal brewhouse yield and performance.
Filtrase® NLC	Liquid blend of fungal highly thermostable β -glucanases with high hemicellulase activity	Improves the mash (wort) and beer filtration and ensures the liberation of the starch for optimal brewhouse yield and performance.
Filtrase® BR-X	β -glucanases with high liquid blend of fungal highly thermostable hemicellulase activity	Improves filterability of wort after mashing.

DSM FOOD SPECIALTIES

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